AMSAT News Service Weekly Bulletins
Issue: ANS-190
Date: 1994-07-09
Sources: amsat-ans-1994-ans-190-weekly.txt

SB SAT @ AMSAT $ANS-190.01
UNAMSAT-1 LAUNCH DELAYED

HR AMSAT NEWS SERVICE BULLETIN 190.01 FROM AMSAT HQ
SILVER SPRING, MD JULY 9, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-190.01

XE1TU Reports That the UNAMSAT-1 Launch Delayed Until September '94

David Liberman (XE1TUU) reports that the UNAMSAT-1 MICROSAT launch has been postponed until early September '94. Originally, XE1TU expected to have UNAMSAT-1 launched into orbit around 15-JUNE-94 aboard a Soviet re-furbished ICBM. This latest delay came one day before XE1TU and his team were supposed to leave for Moscow. The apparent reason for the delay is due to the conflicting vacation schedules of civilian and military personel at the launch site. XE1TU recently received an official letter from Soviet officials explaining this postponement. XE1TU was encouraged by this communication because it means that launch will definitely happen now. In the meantime, UNAMSAT-1 team are working hard to "fine-tune" all the software for the satellite. Except for working some minor software issues, the Bulletin Board System (BBS) software is currently being tested "real-time" by radio amateurs in the local area. UNAMSAT-1 will have a BBS similar to AO-16, LO-19, and IO-26. Inaddition to the BBS, UNAMSAT-1 will carry a scientific payload to detect the velocity and direction of "micro-meteorites." Please stay tuned to the AMSAT News Service (ANS) bulletins for further information about the launch status of UNAMSAT-1.

[The AMSAT News Service (ANS) would like to thank David Liberman (XE1TU) for this bulletin item.]

/EX
SB SAT @ AMSAT $ANS-190.02
STS-65 SAREX MISSION BEGINS

HR AMSAT NEWS SERVICE BULLETIN 190.02 FROM AMSAT HQ
SILVER SPRING, MD JULY 9, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-190.02

STS-65 SAREX Mission Begins!

The Space Shuttle Columbia roared into the blue skies of the Kennedy Space Center on Friday, 08-JULY-94 as the second International Microgravity Laboratory Mission (IML-02) began. The near flawless launch countdown sequence resulted in an on-time launch of the STS-65 mission at 16:43 UTC. The seven member crew of STS-65 will spend 14 days on-orbit. Two of the crew members are ham radio operators. They are Shuttle Commander Robert Cabana, (KC5HBV who was just licensed) and Don Thomas (KC5FVF). The two will operate the Shuttle Amateur Radio Experiment (SAREX). SAREX is a secondary mid-deck payload that allows ham radio operators and school students the opportunity to talk to the astronauts while they are in orbit. Ground based amateur radio operators can communicate with the two astronaut hams through packet radio and, when time permits, via voice contacts. Thirteen scheduled school group contacts with students in the US, Germany, and Japan are also planned.

At approximately 22:30 Mission Elapsed Time (MET) into the flight of

STS-65, the Shuttle Amateur Radio Experiment was set up and activated. One orbit later, as the Shuttle passed over the southern portion of the US, the Bair Middle School in Sunrise Florida had an opportunity to chat with Commander Bob Cabana (KC5HBV). During the conversation, he looked out the window and reported seeing partly cloudy weather as he passed over Florida. The Bair Middle school had an outstanding "horizon-to-horizon" contact. The team at the school reported that 22 students talked with Commander Cabana during their contact opportunity.

The following is the latest keplerian element set for STS-65. Monitor the WA3NAN Shuttle re-broadcast frequencies and daily ARRL bulletins to pick up the latest element sets. The following are the frequencies for the re-broadcasts:

Goddard Amateur Radio Club, WA3NAN, Greenbelt Maryland, SAREX Bulletins and Shuttle Retransmissions 3860 KHz, 7185 KHz, 14,295 KHz, 21,395 KHz, 28,650 KHz and 147.45 MHz (FM)

ARRL Amateur Radio Station, W1AW, Newington, CT SAREX News Bulletins 3990, 7290, 14,290, 18,160, 21,390, and 28,590 KHz and 147.555 MHz (FM)

Also, bulletins available on INTERNET, via AMSAT News Service (ANS) bulletins, Compuserve, and many of our local Packet Radio BSS.

The following is a summary of the frequencies that the Shuttle astronauts will use during SAREX operations:

All operations in split mode. Do not transmit on the downlink frequency.

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Voice Freqs: Downlink: 145.55 MHz  (Worldwide)
             Uplinks : 144.91, 144.93, 144.95, 144.97, 144.99 MHz (Except
                       Europe)
                      144.70, 144.75, 144.80 MHz (Europe only)

Packet Freqs: Downlink: 145.55 MHz
              Uplink  : 144.49 MHz
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Note: The crew will not favor any specific uplink frequency, so your ability to work the crew will be the "luck of the draw."

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STS-65
1 23173U 94105A   94191.62949203  .00064328  00000-0  21757-3 0    61
2 23173  28.4654 353.2447 0002401 329.9288  30.1191 15.90390986   323

Satellite: STS-65
Catalog number: 23173
Epoch time:      94191.62949203   =    (10-JUL-94   15:06:28.11 UTC)
Element set:     006
Inclination:       28.4654 deg
RA of node:       353.2447 deg           Space Shuttle Flight STS-65
Eccentricity:     .0002401              Keplerian element set JSC-006
Arg of perigee:   329.9288 deg          from NASA Flight Day  3 vector
Mean anomaly:      30.1191 deg
Mean motion:   15.90390986 rev/day              G. L. Carman (WA5NOM)
Decay rate:     6.4328e-04 rev/day^2      NASA Johnson Space Center
Epoch rev:              32
Checksum:              298
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[The AMSAT News Service (ANS) would like to thank Frank Bauer and the SAREX Working Group for this bulletin item.]

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/EX
SB SAT @ AMSAT   $ANS-190.03
APOLLO 11 SPECIAL EVENT STATIONS
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HR AMSAT NEWS SERVICE BULLETIN 190.03 FROM AMSAT HQ
SILVER SPRING, MD JULY 9, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-190.03

Apollo 11 25th Anniversary Amateur Radio Special Event Station Activity

At 16:27 EDT, Sunday afternoon, July 20, 1969, astronaut Neil A. Armstrong spoke the words "Houston, Tranquility Base here. The Eagle has landed." At 22:56 EDT, later the same day, Armstrong stepped down from the ladder of the Lunar Module onto the Moon's surface and spoke the words, "That's one small step for a man, one giant leap for mankind."

To commemorate that historic event twenty-five years ago next week, amateur radio clubs and groups at NASA Headquarters and the various NASA field centers will be on the air as "Special Event Stations", contacting amateur radio operators around the world.

Amateur Radio clubs or groups from twelve NASA locations are currently preparing for the 60-hour special event operating period from their respective facilities. Ham groups from other NASA locations may also be on-line to participate by the time the special event period arrives. This is the first time so many NASA stations will be represented on the air at one time. Contacts with these stations during the special event period will be confirmed on request with a certificate to commemorate man's first steps on the Moon and the special event activity.

Details:

Event Name:
Apollo 11 Moon Landing 25th Anniversary

Date/Time Period:
17:00Z, July 19 through 05:00Z, July 22
(13:00 EDT, July 19 through 01:00, July 22)

Modes:
CW, SSB, FM, Packet, Pactor, Amtor, RTTY, SSTV, ATV, Satellites.

Frequencies:
HF CW/SSB: Check 11 (as in Apollo 11) kHz up from the bottom of the General Class portion of the amateur radio bands (except 10m SSB: 28.411+ MHz).

Other Modes:
Check modes/frequencies as indicated by the individual stations below.

QSL Information:
A certificate is being designed to commemorate this special event activity, which will be individualized for each special event station.

Domestic Stations: Send a 9" x 12" self-addressed, stamped envelope to the callbook address (CBA) of the station worked or to the address specified by the station worked. Attach $0.52 postage to cover return mailing.

DX Stations: Send a 9" x 12" self-addressed envelope to the appropriate address, with sufficient IRC's or U.S. Postage for return mailing of up to 1.5 oz (42.52 grams).
Europe = $1.40US postage (3 IRC);

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     Mexico = $0.63US postage (2 IRC);
     Canada = $0.55US (2 IRC).

Individual Station Specifics:
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Ames Amateur Radio Club,
NASA Ames Research Center, Moffett Field, CA
          Callsign:             K6MF
          Bands:                40-10m (excl. WARC), 2m
          Modes:                CW, SSB, FM
          Special Freqs:        145.585 MHz
          QSL Address:          AARC
                                Box 73
                                Moffett Field, CA 94035-1000

Dryden Amateur Radio Club,
NASA Dryden Flight Research Center, Edwards, CA
          Callsign:             KF7GD
          Bands:                80-10m (incl WARC), 2m
          Modes:                CW, SSB
          Special Freqs:        2m SSB: 144.25 MHz; FM: 146.55 MHz
          QSL Address:          NASA DFRC
                                Attn: Dryden ARC
                                POB 273
                                Edwards, CA  93523

Goddard Amateur Radio Club, Inc.,
NASA Goddard Space Flight Center, Greenbelt, MD
          Callsign:             WA3NAN
          Bands:                160-10m (incl WARC), 2m
          Modes:                CW, SSB
          Special Freqs:        2m: 146.58 FM Simplex
          QSL Address:          Callbook Address, or
                                GARC
                                P.O. Box 86
                                Greenbelt, MD  20768-0086

Guam Contingency Landing Site Amateur Radio Group Guam
     Callsign:                  KC4YDP/KH2
     Bands:                     80-10m (incl WARC)
     Modes:                     CW, SSB
     Special Freqs:
     QSL Address:               NASA
                                RADIO
                                Kennedy Space Center, Florida  32899

NASA Headquarters Amateur Radio Group
Washington, D.C.
          Callsign:             N4ZR
          Bands:                80-10 (incl WARC)
          Modes:                CW, SSB
          Special Freqs:
          QSL Address:          CBA or
                                N4ZR
                                2003 Sarazen Place
                                Reston, VA     22091-3809


Jet Propulsion Laboratory Amateur Radio Club and
Goldstone Amateur Radio Club
Jet Propulsion Laboratory, Pasadena, CA
          Callsign:             W6VIO
          Bands:                80-10 (incl WARC), 2m
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          Modes:                CW, SSB, Amtor, Packet, RTTY, Pactor
          Special Freqs:        SSTV: 14.230 MHz
                                Packet Node/BBS (W6VIO-1):
                                144.090/223.540 MHz
                                2m Repeaters (freq in MHz):
                                (W6VIO) 147.15+/224.72-
                                (WB6TZS)145.28-/223.96-/447.325-
                                Satellites: AO10/13/LEOS SSB/CW
          QSL Address:          Jet Propulsion Laboratory Amateur Radio
                         Club
                                M/S 168-327
                                4800 Oak Grove Dr.
                                Pasadena, Ca. 91109

Johnson Space Center Amateur Radio Club
NASA Johnson Space Center, Houston, TX
          Callsign:             W5RRR
          Bands:                80-10 (incl WARC), 2m, 70cm
          Modes:                CW, SSB, FM, Digital Modes,
                                SSTV, ATV, Satellites
          Special Freqs:        2m repeaters
          QSL Address:          JSC ARC/W5RRR
                                Johnson Space Center
                                Houston, Texas 77058
          BBS:                  (713)244-5625

Kennedy Space Center Amateur Radio Group
Kennedy Space Center, FL
          Callsign:             KC4TCV (SSB) / AD4NA (CW)
          Bands:                160-10m (incl WARC)
          Modes:                CW, SSB, Pactor, RTTY, Satellites
          Special Freqs:        Packet: 145.09 MHz;
                                2m Repeater 146.34/.94, 146.31/.91,
                                    146.96/.36
          QSL Address:          NASA
                                RADIO
                                Kennedy Space Center, Florida  32899

NASA Lewis Amateur Radio Club (NLARC)
NASA Lewis Research Center, Cleveland, OH
          Callsign:             AK8Y
          Bands:                80-10m
          Modes:                CW, SSB, RTTY, Amtor, Pactor, FM,
                          Satellites
          Special Freqs:        Repeaters: 147.195+/444.1 MHz
                                RTTY: 14.080-90MHz
                                Amtor/Pactor: 14.060-80MHz.
                                Packet: 145.01MHz (call: AK8Y-8)
          QSL Address:          NASA Lewis Amateur Radio Club
                                21000 Brookpark Rd, MS 54-6
                                Cleveland, OH 44135
                                Attn: Don Hilderman

Marshall Amateur Radio Club
NASA Marshall Space Flight Center, Huntsville, AL
          Callsign:             WA4NZD
          Bands:                160-6m  (incl WARC)
          Modes:                Primarily SSB
          Special Freqs:        6m: 50.130 MHz; Oscar 13, Mode B
     QSL Address:               Marshall Amateur Radio Club
                                CM21X
                                MSFC, AL   35812
          Phone Message:        (205)544-7568
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Stennis Space Center Amateur Radio Club
NASA Stennis Space Center, MS
          Callsign:             K5GY
          Bands:                40-10m (no WARC), 2m
          Modes:                CW, SSB, Novice Bands, Packet
          Special Freqs:        2m repeater: 146.70 MHz
          QSL Address:          Stennis Space Center Amateur Radio Club
                                Bldg 1201
                                Stennis Space Center, MS 39529

Wallops Island Amateur Radio Club
NASA Wallops Flight Facility, Wallops Island, VA
          Callsign:             KE3ND
          Bands:                80-10m (incl WARC)
          Modes:                CW/SSB
          Special Freqs:        2m: 147.55MHz simplex
          QSL Address:          Wallops Island ARC
                                NASA Wallops Flight Facility
                                Building E-134
                                Wallops Island, VA  23337

White Sands Complex Amateur Radio Group
NASA White Sands Test Facility, Las Cruces, NM
          Callsign:             KF7E
          Bands:                80-10m (incl WARC)
          Modes:                CW/SSB
          Special Freqs:
          QSL Address:          KF7E
                                P.O. Box 627
                                Organ, NM 88052

[The AMSAT News Service (ANS) would like to thank the W5BWF for this
 information. W5BWF can be reached at his CompuServe address of 71575,1677]

/EX
SB SAT @ AMSAT   $ANS-190.04
WEEKLY OSCAR STATUS REPORTS

HR AMSAT NEWS SERVICE BULLETIN 190.05 FROM AMSAT HQ
SILVER SPRING, MD JULY 9, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-190.05

Weekly OSCAR Status Reports: 09-JUL-94

AO-13: Current Transponder Operating Schedule:
L QST *** AO-13 TRANSPONDER SCHEDULE ***  1994 May 07-Jul 11
Mode-B  : MA   0 to MA 170 |
Mode-BS : MA 170 to MA 218 |
Mode-S  : MA 218 to MA 220 |<- S beacon only
Mode-S  : MA 220 to MA 230 |<- S transponder; B trsp. is OFF
Mode-BS : MA 230 to MA 250 |        Alon/Alat 230/-5
Mode-B  : MA 250 to MA 256 |
Omnis   : MA 250 to MA 120 |  Move to attitude 180/0, Jul 11

L QST de G3RUH 1994 Jul 05.  Magnetorquing from attitude 243/+5 to 180/0
commences on Jul 07 [Thu] 05:10 UTC, Orbit #4642/224, and continues for 10+
perigees.  Estimated interim attitudes are: Orbit Alon/Alat: 4643 235/+4:
4645 221/-2: 4647 211/-10: 4649 205/-10: 4651 193/-12: 4653 181/-13, then
a final adjustment.  For command purposes during this 4-day period Mode-S
beacon is ON MA 140-150, i.e. Mode-B OFF for 26 mins.  The new schedule
will start orbit 4651 MA 150 Jul 11 [Mon] 08:51 UTC.  Magnetorquing (att-
itude changing) is not an exact science, and minor deviations from the
above plan sometimes occurs.  Please don't rely on gossip and rumor! Con-
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tinuous up-to-date information about AO-13 operations is always available on the beacons, 145.812 MHz or 2400.664 MHz in CW, RTTY and 400 bps PSK. These bulletins are also posted to Internet, ANS, Packet, PacSats etc., and many international newsletters. A 400 bps PSK decoder is available from G3RUH and several DSP products; display software P3C.EXE etc. from many AMSAT groups. The active command stations are listed below, and constructive feedback about operations is always welcome.

Peter DB2OS @ DB0FAU.#NDS.DEU.EU
James G3RUH @ GB7DDX.#22.GBR.EU
Graham VK5AGR @ VK5WI.#ADL.#SA.AUS.OC

The above may also be reached via Internet (callsign@amsat.org) and KO-23. Please remember to state clearly a return address.
[G3RUH/DB2OS/VK5AGR]

MIR: The new Soyuz flight has the following 2 cosmonauts boarding Mir as Crew #16: Yurij Malenchenko (R0MIR) & Talgat Musabaeyv (R0MIR). They will be joining Valerij Polyakov (U3MIR) who is attempting to break the manned space flight endurance record. The call signs for the new cosmonauts (R0MIR) are generic for the Mir, so don't be surprised if the call sign should change in the near future. The crew that will be leaving Mir is Viktor Afanasiev (U9MIR) and Yurij Usachev (R3MIR). This information comes from Serge Samburov, Space "MIR" QSL Manager Chief of Cosmonaut Amateur Radio Department NPO "Energia." All Mir contact QSLs should be sent directly to Serge at: P.O. Box 73, Kaliningrad-10 city, Moscow Area, 141070, RUSSIA.
[N2WWD]

DO-17: DO-17 still continues to transmit its voice message on a downlink frequency of 145.825 MHz.

KO-25: There have been several reports showing up on the KO-25 BBS that apparently the NASA 2-line elements are not correct. It seems that they are the elements of a satellite that is within close proximity of KO-25. This problem was first noted by W5RKN and after posting a message to the BBS of KO-25 several operators replied that they also have noted the same problem. All KO-25 users are asked to keep monitoring this problem while inquiries are being made are made about correcting the keps for KO-25. [W5RKN]

The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly OSCAR status reports. If you have a favorite OSCAR which you work on a regular basis and would like to contribute to this bulletin, please send your observations to WD0HHU at his CompuServe address of 70524,2272, on INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO area, WD0HHU @ N0QCU. Also, if you find that the current set of orbital elements are not generating the correct AOS/LOS times at your QTH, PLEASE INCLUDE THAT INFORMATION AS WELL. The information you provide will be of value to all OSCAR enthusiasts.

/EX